LISTING OF CLAIMS:

1. **(Currently Amended)**   A computer implemented method for enabling a ~~student~~ user to perform an exercise remotely using a client system, comprising:

receiving a request from the user to connect to a remote server, wherein the request includes user information;

accessing a course database to determine one or more courses associated with the user, based on the user information;

transmitting a list of courses associated with the user to the client system, wherein each course in the list of courses includes one or more exercises;

receiving data indicating selection of a user-selected course from the list of courses;

accessing the course database to determine the one or more exercises associated with the selected course; and

transmitting a list of exercises associated with the selected course from ~~a~~ the server to the client system, whereby the client system displays the list of exercises to the student, and wherein each exercise on the list is associated with one or more virtual machines~~.;~~

~~receiving at the server data transmitted from the client system, wherein the data indicates that the student selected a particular exercise from the list;~~

~~launching on a computer system that comprises a remote display server the one or more virtual machines that are associated with the particular exercise; and~~

~~transmitting data to the client system, wherein the data directs the client system to establish a session with the remote display server, whereby the student is able to use the client system to remotely interact with at least one of the one or more virtual machines after the connection is established.~~

2.   **(Original)** The method of claim 1, wherein the client system comprises a web browser and a remote display viewer.

3.   **(Original)** The method of claim 1, wherein the act of launching the one or more virtual machines comprises step of sending a message to a virtual machine launcher, wherein the message includes an identifier that identifies the particular exercise.

4.   **(Original)** The method of claim 1, wherein the data transmitted to the client system further directs the client system to display to the student one or more selectable icons or links, wherein each one of the selectable icons or links is associated with a unique one of the one or more virtual machines that are associated with the particular exercise.

5.   **(Original)** The method of claim 4, further comprising receiving at the server data transmitted from the client system, wherein the data indicates that the student activated one of the selectable icons or links.

6.   **(Original)** The method of claim 5, further comprising:
        determining the virtual machine associated with the activated icon or link, wherein the virtual machine has an operating system that generates a user interface; and
        transmitting to the client system the user interface, wherein the client system displays the user interface to the student, thereby enabling the student to interact with the operating system.

7. **(Currently Amended)**   A computer implemented method for enabling a student to perform an exercise remotely, comprising:
        accessing a course database to determine one or more courses associated with the student based on student information;
        transmitting a list of courses associated with the student wherein each course in the list of courses includes one or more exercises;

upon receipt of data indicating a selection of a course, displaying a list of exercises associated with the course to the student, wherein each exercise is associated with one or more virtual machines, wherein each one of the virtual machines has an operating system that produces a graphical user interface;

enabling the student to select an exercise from the list;

transmitting an exercise identifier to a server after the student selects an exercise from the list, wherein the exercise identifier identifies the selected exercise, wherein the server launches the one or more virtual machines that are associated with the selected exercise after receiving the exercise identifier, the one or more virtual machines being launched on a computer that comprises a remote display server; and

launching a remote display viewer, wherein the viewer establishes a connection with the remote display server and displays to the student a graphical user interface produced by one of the one or more operating systems after establishing the connection with the remote display server.

8.   (Original) The method of claim 7, further comprising displaying to the student a selectable icon or link for each virtual machine that is associated with the selected exercise.

9.   (Original) The method of claim 8, further comprising:

receiving an indication that the student selected one of the selectable icons or links;

transmitting an identifier to the server after receiving the indication, wherein the identifier identifies the icon or link that was activated, wherein the activated icon or link is associated with one of the one or more virtual machines that were launched by the server; and

displaying to the student the user interface produced by the operating system of the virtual machine that is associated with the activated icon or link.

10.   (Original) The method of claim 7, further comprising the step of receiving data transmitted from the server after transmitting the exercise identifier to the server, wherein the

viewer establishes the connection with the remote display server in response to the reception of the data.

11. **(Currently Amended)** A system for enabling a student to perform an exercise remotely using a client system, comprising:

a first computer system comprising a distance learning front-end server; and

a plurality of second computer systems, each second computer system having installed therein a virtual machine platform for allowing virtual machines to run on the second computer system, a virtual machine launcher, and a remote display server, wherein the distance learning front-end server is operable to:

access a course database to determine one or more courses associated with the student based on student information;

transmit a list of courses associated with the student to the client system wherein each course in the list of courses includes one or more exercises;

upon receipt of data indicating a selection of a course, transmit a list of exercises associated with the selected course to the client system, whereby the client system displays the list of exercises to the student, and wherein each exercise on the list is associated with one or more virtual machines;

receive data transmitted from the client system, wherein the data indicates that the student selected a particular exercise from the list; select one of the plurality of second computer systems;

transmit to the virtual machine launcher installed on the selected second computer system an exercise identifier that identifies the particular exercise selected by the student, wherein the virtual machine launcher launches the one or more virtual machines that are associated with the particular exercise; and

transmit to the client system data that directs the client system to establish a session with the remote display server installed on the selected second computer system, whereby the student is able to use the client system to remotely interact with at least one of the one or more virtual machines that were launched by the virtual machine launcher after the connection is established.

12.   (Original) The system of claim 11, wherein the first computer system further
10 comprises a back-end server, wherein each one of the virtual machine launchers
registers with the backend server.

13.   (Original) The system of claim 11, wherein in selecting one of the plurality of
second computer systems, the front-end server determines which of the plurality of
second computer systems are available and selects one of the available second computer
systems.

14.   (Original) The system of claim 11, wherein, after receiving the exercise identifier
transmitted from the front-end server, the virtual machine launcher transmits to the
front-end server one or more virtual machine identifiers, wherein each one of the one or
more virtual machine identifiers identifies one of the virtual machines with which the
particular exercise is associated.

15.   (Original) The system of claim 11, wherein the data transmitted to the client system
from the front-end server further directs the client system to display one or more
selectable icons or links, wherein each one of the selectable icons or links is associated
with a unique one of the one or more virtual machines with which the particular
exercise is associated.

16.   (Currently Amended) A computer system comprising:
        a virtual machine platform for enabling virtual machines to run on the computer
system; and
        a virtual machine launcher that is operable to:

access a course database to determine one or more courses associated with a user based on user information;

transmit a list of courses associated with the user to the client system wherein each course in the list of courses includes one or more exercises;

receive data indicating selection of a user-selected course from the list of courses;

access the course database to determine the one or more exercises associated with the selected course;

transmit a list of exercises associated with the selected course;

receive an identifier that identifies an exercise, wherein the exercise is associated with one or more virtual machines;

determine the one or more virtual machines with which the identified exercise is associated; and

launch on the computer system the determined one or more virtual machines.

17.   (Original) The computer system of claim 16, wherein the virtual machine launcher receives the identifier from a server running on a second computer system.

18.   (Original) The computer system of claim 17, wherein, after determining the one or more virtual machines with which the identified exercise is associated, the virtual machine launcher transmits to the server one or more virtual machine identifiers, wherein each one of the one or more virtual machine identifiers identifies one of the determined virtual machines.

19.   (Original) The computer system of claim 18, wherein, in response to receiving from the server an identifier that identifies one of the determined virtual machines, the virtual machine launcher brings into focus the window in which the identified virtual machine is running.

20.   (Original) The computer system of 17, further comprising a remote display server, wherein, after receiving a network address of a second computer system, the virtual machine

launcher directs the remote display server to accept only connections that originate from that network address.

21. **(Currently Amended)** A computer program product for enabling a ~~student~~ <u>user</u> to perform an exercise remotely using a client system, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

<u>receiving a request from the user to connect to a remote server, wherein the request</u> <u>includes user information;</u>

<u>accessing a course database to determine one or more courses associated with the user,</u> <u>based on the user information;</u>

<u>transmitting a list of courses associated with the user to the client system, wherein each</u> <u>course in the list of courses includes one or more exercises;</u>

transmitting a list of exercises to the client system <u>upon receipt of data indicating the</u> <u>selection of a course</u>, whereby the client system displays the list of exercises to the student, and wherein each exercise on the list is associated with one or more virtual machines;

receiving data transmitted from the client system, wherein the data indicates that the student selected a particular exercise from the list;

launching on a computer system that comprises a remote display server the one or more virtual machines that are associated with the particular exercise; and

transmitting data to the client system, wherein the data directs the client system to establish a session with the remote display server, whereby the student is able to use the client system to remotely interact with at least one of the one or more virtual machines after the connection is established.

22. **(Original)** The computer program product of claim 21, wherein the computer instructions for launching the one or more virtual machines comprises computer instructions for sending a message to a virtual machine launcher, wherein the message includes an identifier that identifies the particular exercise.

23.   **(Original)** The computer program product of claim 21, wherein the data transmitted to the client system further directs the client system to display to the student one or more selectable icons or links, wherein each one of the selectable icons or links is associated with a unique one of the one or more virtual machines that are associated with the particular exercise.

24.   **(Original)** The computer program product of claim 23, further comprising computer instructions for receiving data transmitted from the client system, wherein the data indicates that the student activated one of the selectable icons or links.

25.   **(Original)** The computer program product of claim 24, further comprising computer instruction for:

determining the virtual machine associated with the activated icon or link, wherein the virtual machine has an operating system that generates a user interface; and

transmitting to the client system the user interface, wherein the client system displays the user interface to the student, thereby enabling the student to interact with the operating system.

26. **(New)**   The method of claim 1 further comprising:

receiving at the server data transmitted from the client system, wherein the data indicates that the user selected a particular exercise from the list;

launching, on a computer system that comprises a remote display server, the one or more virtual machines that are associated with the particular exercise; and

transmitting data to the client system, wherein the data directs the client system to establish a session with the remote display server, whereby the user is able to use the client system to remotely interact with at least one of the one or more virtual machines after the connection is established.